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EXAMINER
KINCAID, KRISTINE LYNN

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2139	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/749,651

Applicant(s)

WINICK ET AL.

Examiner

Nicole M. Young

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 December 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>3/29/2004</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The Applicant uses "means for" thought the claim language. The Examiner considers 112 6th paragraph to be invoked.

Information Disclosure Statement

The information disclosure statement filed 3/29/2004 fails to comply with 37 CFR 1.98(a)(3) because it does not include a concise explanation of the relevance, as it is presently understood by the individual designated in 37 CFR 1.56(c) most knowledgeable about the content of the information, of each patent listed that is not in the English language. It has been placed in the application file, but the information referred to therein has not been considered.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 7-12, 19-24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The Examiner cannot determine from the specification structure to correlate with the "means for" language as required.

Claim 5 recites the limitation "new connection". There is insufficient antecedent basis for this limitation in the claim. The Examiner cannot determine what new connection the claim is referring to.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 7-12, 19-24 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. These claims are directed to systems of software. Generally, functional descriptive material, such as a computer program, is statutory when it is stored on a tangible computer readable medium. See MPEP § 2106 IV.B.I(a).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blewett et al. (US 7,131,141) herein Blewett, and further in view of Yang (US 2004/0117485).

Claim 1, 7, 19 discloses a method for enabling a first communications system and a second communications system, respectively located behind a first firewall and a second firewall, to directly communicate with each other, wherein each of said first and

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second firewalls respectively prevents communication initiated from an external data network from reaching said first or second communications system, said method comprising:

establishing a first secure connection via said external data network between said first communications system and a central communications station through said first firewall, wherein said first secure connection is initiated by said first communications system thereby being allowed to pass through said first firewall;

establishing a second secure connection via said external data network between said second communications system and said central communications station through said second firewall, wherein said second secure connection is initiated by said second communications system thereby being allowed to pass through said second firewall (The communication scheme of a first and second firewall is shown in Yang Fig. 2 and associated text where 210 and 120 both connect to 205, interpreted to be the central communications station, through firewalls 110 and 110 respectively);

forwarding connection information of said second communications system to said first communications system via said first secure connection using said central communications station (Yang does not but Blewett teaches forwarding connection information. Blewett column 3 lines 55-64 teach clients connected through a TCP/IP connection. It would be obvious to one of ordinary skill in the art at the time of invention to use a TCP/IP connection where it would be inherent that connection information is exchanged in the connection oriented protocol. The motivation to combine Yang and Blewett would be within the same column and lines of Blewett where it states that a

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client in one network is initiating communication with a host on another network through a gateway (interpreted to be the central communication station). Column 3 lines 29-31, "A protected... security measures" teach the firewalls used in Yang); and

transmitting data from said first communications system to said second communications system, wherein said data uses said connection information of said second communications system as its destination information and uses connection information for said central communications station as its source information so as to appear as if it had originated from said central communications station (Blewett column 3 lines 65-67 and column 4 lines 1-3 where the security gateway is interpreted to be the central communications station as above).

Claim 2, 8, 20 discloses the method of claim 1 wherein said connection information for said second communications system includes Internet protocol address and port of said second communications system and wherein said connection information for said central communications station includes Internet protocol address and port of said central communications station (Blewett column 10 lines 8-10 teach transformations based on network address/port).

Claim 3, 9, 21 discloses the method of claim 1 further comprising:

forwarding connection information of said first communications system to said second communications system via said second secure connection using said central communications station; and

transmitting data from said second communications system to said first communications system, wherein said data uses said connection information of said

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first communications system as its destination information and uses connection information for said central communications station as its source information so as to appear as if it had originated from said central communications station (Blewett column 8 lines 29-37 teach source network address translation).

Claim 4, 10, 22 discloses the method of claim 3 wherein said connection information for said first communications system includes Internet protocol address and port of said first communications system (Blewett column 10 lines 8-10 teach transformations based on network address/port).

Claim 5, 11, 23 discloses a method for enabling a first communications system and a second communications system, respectively located behind a first firewall and a second firewall and having respective associated first and second network address translation devices, to directly communicate with each other, wherein each of said first and second firewalls respectively prevents communication initiated from an external data network from reaching said first or second communications system and wherein each of said first and second network address translation devices respectively provides public source information for outbound data originated from said first and second communications system, said method comprising:

establishing a first secure connection via an external data network between said first communications system and a central communications station through said first firewall, wherein said first secure connection is initiated by said first communications system thereby being allowed to pass through said first firewall (Yang fig 2 Connection (210₁->205) associated text describes it as a secure connection. Yang does not but

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Blewett, column 2 lines 25-35, teaches the use of source and destination address translation of port/ip address. It would be obvious to one of ordinary skill in the art at the time of invention to translate the source and destination ip addresses/ports of data exiting a private intranet. The motivation to combine would be Blewett column 2 lines 51-55 "network address...home network");

establishing a second secure connection via said external data network between said second communications system and said central communications station through said second firewall, wherein said second secure connection is initiated by said second communications system thereby being allowed to pass through said second firewall (Yang fig 2 Connection (120₂->205) and associated text describes it as a secure connection);

transmitting connection information for establishing new connection with said first communications system from said first communications systems to said central communications station via said first secure connection (Yang does not but Blewett teaches forwarding connection information. Blewett column 3 lines 55-64 teach clients connected through a TCP/IP connection. It would be obvious to one of ordinary skill in the art at the time of invention to use a TCP/IP connection where it would be inherent that connection information is exchanged in the connection oriented protocol. The motivation to combine Yang and Blewett would be within the same column and lines of Blewett where it states that a client in one network is initiating communication with a host on another network through a gateway (interpreted to be the central

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communication station). Column 3 lines 29-31, " A protected... security measures" teach the firewalls used in Yang);

transmitting connection information for establishing new connection with said second communications system from said second communications system to said central communications station via said second secure (Yang does not but Blewett teaches forwarding connection information. Blewett column 3 lines 55-64 teach clients connected through a TCP/IP connection. It would be obvious to one of ordinary skill in the art at the time of invention to use a TCP/IP connection where it would be inherent that connection information is exchanged in the connection oriented protocol. The motivation to combine Yang and Blewett would be within the same column and lines of Blewett where it states that a client in one network is initiating communication with a host on another network through a gateway (interpreted to be the central communication station). Column 3 lines 29-31, " A protected... security measures" teach the firewalls used in Yang);

forwarding said connection information for establishing new connection with said second communications system to said first communications system via said first secure connection using said central communications station (Yang does not but Blewett teaches forwarding connection information. Blewett column 3 lines 55-64 teach clients connected through a TCP/IP connection. It would be obvious to one of ordinary skill in the art at the time of invention to use a TCP/IP connection where it would be inherent that connection information is exchanged in the connection oriented protocol. The motivation to combine Yang and Blewett would be within the same column and lines of

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Blewett where it states that a client in one network is initiating communication with a host on another network through a gateway (interpreted to be the central communication station). Column 3 lines 29-31, "A protected...security measures" teach the firewalls used in Yang);

transmitting a connection request from said first communications system to said second communications system wherein said connection request uses said connection information for establishing new connection with said second communications system as its destination information (Blewett column 3 lines 55-65 teach initiating a IP connection and lines 65-67 and column 4 lines 1-3 teach address translation);

forwarding said connection information for establishing new connection with said first communications system to said second communications system via said second secure connection using said central communications station (Yang does not but Blewett teaches forwarding connection information. Blewett column 3 lines 55-64 teach clients connected through a TCP/IP connection. It would be obvious to one of ordinary skill in the art at the time of invention to use a TCP/IP connection where it would be inherent that connection information is exchanged in the connection oriented protocol. The motivation to combine Yang and Blewett would be within the same column and lines of Blewett where it states that a client in one network is initiating communication with a host on another network through a gateway (interpreted to be the central communication station). Column 3 lines 29-31, "A protected...security measures" teach the firewalls used in Yang);

transmitting connection acknowledgement and request from said second communications system to said first communications system wherein said connection acknowledgement and request uses said connection information for establishing new connection with said first communications system as its destination information (Blewett column 8 lines 45-45 teach a "reply packet" to the initiating host from the destination host); and

in response to receiving said connection acknowledgement and request from said second communications system, transmitting a connection acknowledgement from said first communications system to said second communications system (Blewett column 3 lines 55-65 teach a TCP/IP connection being established).

Claim 6, 12, 24 discloses the method of claim 5 wherein:

said connection information for establishing a new connection with said first communications system includes public Internet protocol address provided by said first network address translation device and port for said first communications system's next connection (Blewett column 2 lines 25-35); and

said connection information for establishing a new connection with said second communications system includes public Internet protocol address provided by said second network address translation device and port for said second communications system's next connection (Blewett column 2 lines 25-35).

Claims 13 and 25 disclose a system for enabling two communications system, located behind firewalls, to directly communicate with each other, said system comprising:

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a central communications station (Yang fig 2 shows 205 as a central communication station);

a first communications system (Yang fig 2, 210) and a second communications system (Yang fig 2, 120), wherein each of said first and second communications system comprises a respective secure connection interface that establishes a secure connection with said central communications station via an external data network through a network access (Yang fig 2 Connection (210₁->205) and Connection (120₂->205) and associated text describes them as secure connections);

a first firewall and a second firewall respectively located between said external data network and said first and second communications systems, wherein each of said first and second firewalls respectively prevents communication initiated from said external data network from reaching said first or second communications system (Yang fig 2 110₁ and 110₂ are 2 firewalls between the internal and external networks); and said central communications station comprises:

a secure connection interface that maintains secure connections with said first and second communications systems via said external communications network through a network access; and a secure redirector that forwards connection information of said second communications system to said first communications system via said secure connection with said first communications system thereby enabling said first communications system to transmit data to said second communications system, wherein said data uses said connection information of said second communications system as its

destination information and uses connection information for said central communications station as its source information so as to appear as if it had originated from said central communications station (Yang does not but Blewett teaches forwarding connection information. Blewett column 3 lines 55-64 teach clients connected through a TCP/IP connection. It would be obvious to one of ordinary skill in the art at the time of invention to use a TCP/IP connection where it would be inherent that connection information is exchanged in the connection oriented protocol. The motivation to combine Yang and Blewett would be within the same column and lines of Blewett where it states that a client in one network is initiating communication with a host on another network through a gateway (interpreted to be the central communication station). Column 3 lines 29-31, "A protected... security measures" teach the firewalls used in Yang.

Blewett column 3 lines 65-67 and column 4 lines 1-3 where the security gateway is interpreted to be the central communications station as above are interpreted to be providing the redirector function through executing source network address translation).

Claims 14 and 26 disclose the system of claims 13 and 27 wherein said connection information for said second communications system includes Internet protocol address and port of said second communications system and wherein said connection information for said central communications station includes Internet protocol address and port of said central communications station (Blewett column 10 lines 8-10 teach transformations based on network address/port).

Claims 15 and 27 disclose the system of claim 13 and 27, wherein said secure redirector additionally forwards connection information of said first communications system to said second communications system via said secure connection with said second communications system thereby enabling said second communications system to transmit data to said first communications system, wherein said data uses said connection information of said first communications system as its destination information and uses connection information for said central communications station as its source information so as to appear as if it had originated from said central communications station (Yang does not but Blewett teaches forwarding connection information. Blewett column 3 lines 55-64 teach clients connected through a TCP/IP connection. It would be obvious to one of ordinary skill in the art at the time of invention to use a TCP/IP connection where it would be inherent that connection information is exchanged in the connection oriented protocol. The motivation to combine Yang and Blewett would be within the same column and lines of Blewett where it states that a client in one network is initiating communication with a host on another network through a gateway (interpreted to be the central communication station). Column 3 lines 29-31, "A protected... security measures" teach the firewalls used in Yang.

Blewett column 3 lines 65-67 and column 4 lines 1-3 where the security gateway is interpreted to be the central communications station as above are interpreted to be providing the redirector function through executing source network address translation).

Claims 16 and 28 disclose the system of claim 15 and 29 wherein said connection information for said first communications system includes Internet protocol address and

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port of said first communications system (Blewett column 10 lines 8-10 teach transformations based on network address/port).

Claims 17 and 29 disclose a system for enabling two communications system located behind firewalls and having associated network translation devices, to directly communicate with each other; said system comprising:

- a central communications station (Yang fig 2 shows 205 as a central communication station);

- a first communications system (Yang fig 2, 210) and a second communications system (Yang fig 2, 120), wherein each of said first and second communications system comprises:

- a respective secure connection interface that establishes a secure connection with said central communications station via an external data network through a network access (Yang fig 2 Connection (210₁->205) and Connection (120₂->205) and associated text describes them as secure connections), and

- a respective transmitter that transmits connection information for establishing a new connection with a respective one of said first and second communications system to said central communications station via said secure connection (Yang paragraph [0019] Communication software...invention, teaches communication software that enables data communications between computer systems.);

- a first firewall and a second firewall respectively located between said external data network and said first and second communications systems, wherein each of said

first and second firewalls respectively prevents communication initiated from said external data network from reaching said first or second communications system (Yang fig 2, 110₁ and 110₂); and

a first network address translation device and a second network address translation device respectively associated with said first and second communications systems, wherein each of said first and second network address translation devices respectively provides public source information for outbound data originated from said first and second communications system (Yang fig 2 Connection (210₁->205) associated text describes it as a secure connection. Yang does not but Blewett, column 2 lines 25-35, teaches the use of source and destination address translation of port/ip address. It would be obvious to one of ordinary skill in the art at the time of invention to translate the source and destination ip addresses/ports of data exiting a private intranet. The motivation to combine would be Blewett column 2 lines 51-55 "network address...home network"); wherein:

said central communications station comprises:

a secure connection interface that maintains secure connections with said first and second communications systems via said external communications network through a network access (Yang does not but Blewett teaches forwarding connection information. Blewett column 3 lines 55-64 teach clients connected through a TCP/IP connection. It would be obvious to one of ordinary skill in the art at the time of invention to use a TCP/IP connection where it would be inherent that connection information is exchanged in the connection oriented

protocol. The motivation to combine Yang and Blewett would be within the same column and lines of Blewett where it states that a client in one network is initiating communication with a host on another network through a gateway (interpreted to be the central communication station), and

a secure redirector that:

forwards said connection information for establishing new connection with said second communications system to said first communications system via said secure connection with said first communications system thereby enabling said first communications system to transmit a connection request to said second communications system wherein said connection request uses said connection information for establishing new connection with said second communications system as its destination information (Yang paragraphs [0034] and [0035] disclose a redirector, and

forwards said connection information for establishing new connection with said first communications system to said second communications system via said secure connection with said second communications system (Yang does not but Blewett teaches forwarding connection information. Blewett column 3 lines 55-64 teach clients connected through a TCP/IP connection. It would be obvious to one of ordinary skill in the art at the time of invention to use a TCP/IP connection where it would be inherent that connection information is exchanged in the

connection oriented protocol. The motivation to combine Yang and Blewett would be within the same column and lines of Blewett where it states that a client in one network is initiating communication with a host on another network through a gateway (interpreted to be the central communication station), thereby:

enabling said second communications system to transmit connection acknowledgement and request from said second communications system to said first communications system wherein said connection acknowledgement and request uses said connection information for establishing new connection with said first communications system as its destination information(Blewett column 8 lines 45-45 teach a "reply packet" to the initiating host from the destination host), and

enabling said first communications system to transmit a connection acknowledgement from said first communications system to said second communications system(Blewett column 3 lines 55-65 teach a TCP/IP connection being established).

Claims 18 and 30 disclose the system of claim 17 wherein:

said connection information for establishing a new connection with said first communications system includes public Internet protocol address provided by said first network address translation device and port for said first communications system's next connection (Blewett column 2 lines 25-35); and

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said connection information for establishing a new connection with said second communications system includes public Internet protocol address provided by said second network address translation device and port for said second communications system's next connection (Blewett column 2 lines 25-35).

Note: Examiner has pointed out particular references contained in the prior arts of record and in the body of this action for the convenience of the applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. Applicant should consider the entire prior art as applicable to the limitations of the claims. It is respectfully requested from the applicant, in preparing for response, to consider fully the entire reference as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior arts or disclosed by the Examiner.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nicole M. Young whose telephone number is 571-270-1382. The examiner can normally be reached on Monday through Friday, alt Fri off, 8:00am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on 571-272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

NMY
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